



- NOTES:**
1. FOR LEGEND, ABBREVIATIONS AND SUMMARY OF EQUIPMENT SEE DRAWING E-1
 2. FOR PROTECTIVE RELAYING AND GROUND FAULT DETECTION ZONE (ZGB) SEE DWS. E-4 & E-5.
 3. ELEMENTARY WIRING DIAGRAM SHOWS THE INTENT OF THE DIFFERENT OPERATIONAL MODES ONLY. EQUIPMENT MANUFACTURER SHALL DEVELOP CIRCUITRY TO ACCOMMODATE HIS BREAKER CONTROL EQUIPMENT.
 4. OUTPUTS FROM CIRCUIT BREAKER SOLID STATE TRIP UNIT.

ELEMENTARY WIRING DIAGRAM LEGEND

- W WHITE INDICATING LIGHT
HEALTHY LOCKOUT CKT.
- G GREEN INDICATING LIGHT
OPEN
- R RED INDICATING LIGHT
CLOSED
- A AMBER INDICATING LIGHT
OPEN
- B BLUE INDICATING LIGHT
CLOSED
- L INDICATES EQUIPMENT LOCATED
IN LOCAL CONTROL CABINET
- CS CONTROL SWITCH
L = LOCAL
R = REMOTE
C = CLOSED
O = OPEN
CAC = CLOSE AFTER CLOSE
(OPENS WHEN "CS" MOVES
TO "TRIP")
- + NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- RELAY COIL
- 52 CIRCUIT BREAKER
- 52 TOC TRUCK OPERATED CONTACT
(CELL SWITCH)
- ZGB ZONE GROUND BUS
- P.O.F.B. 2 POLE PULL OUT TYPE FUSE BLOCK
- FUSE

240V AC FOR CONTINUATION SEE BOTTOM LEFT

TO LOW VOLTAGE FEEDER SWITCHGEAR SECTION BUS 1 BREAKERS

480V TS AIR CIRCUIT BREAKER T1-3

LOCKOUT CIRCUIT

480V FEEDER AIR CIRCUIT BREAKER "1-1"

TYPICAL FOR ALL FEEDER CKT BKRS, INCLUDING
CKT BKRS IN LOW VOLTAGE FEEDER
SWITCHGEAR SECTION BUS EL.

SINGLE FEEDER LINE-UP (BUS-1 SHOWN)

TYPICAL FOR OTHER LINE-UPS
FOR DESIGNATIONS SEE DRAWINGS E-4 & E-5



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Title
ELECTRICAL
SUBSTATION EQUIPMENT
TOWER ONE AND TWO

ELECTRICAL
ELEMENTARY
WIRING DIAGRAM

No. Date Revision Approved

This drawing subject to conditions in contract.
All inventions, ideas, designs and methods
herein are reserved to Port Authority and
may not be used without its written consent.

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Designed by Drawn by Checked by

Date FEB 10, 1995 Scale NONE

Contract Number Drawing Number
WTC-802.072A E-13